

REMARKS

This application has been reviewed in light of the Final Office Action dated May 4, 2010. Claims 8-10, 13 and 15-16 are presented for examination, of which Claim 8 is in independent form. Favorable reconsideration is requested.

Claims 8, 9, 13, 15 and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Bouette in view of U.S. Patent Application Publication No. 2002/0090437 (Brown et al). Claim 10 stands rejected over the same art further in view of Cully and Beckett. Applicant respectfully traverses these rejections, particularly in view of the amendment made herein and the remarks set forth below.

The Examiner asserts that Bouette teaches a process for making a confectionery product comprising: heating a supply of chocolate to bring it to its molten state. Applicant does not disagree. The Examiner then alleges that the molten state is achieved in a mixing device and further that gas is incorporated by stirring to form bubbles in the chocolate, making reference to columns 2, lines 9-25, column 3, lines 24-43 and column 4, lines 20-23 and 30-35. In a similar way, the Examiner alleges that Bouette teaches that the gas is incorporated into the chocolate by a mixing head that agitates the melted chocolate (Figure 1, reference characters 10 and 12, line 3 and 24-29, and column 4, lines 20-23 and 30-35). It is respectfully submitted that after careful consideration of the reference, both these allegations are not supported.

Specifically, having reference to Figure 1 and column 2, line 47-59, it will be noted that while it is correct that a jacketed tank 10 is used to receive the chocolate for melting and that a stirring device 12 is used to move the chocolate around within the tank 10, no gas incorporation is performed by said stirring device 12. Rather, the liquefied, non-aerated chocolate exits tank 10 through line 13 and cock valve 14 and via heated conduit 16 and positive

displacement pump 17 is pumped into a continuous mixer 19 being a model 4M E.T. Oaks continuous mixer.

Moreover, in column 2, line 56 following, Bouette specifically states that a stream of carbon dioxide is fed into the line 18 which runs between positive displacement pump 17 and mixer 19. In other words, introduction of gas into the liquefied chocolate does not take place at the jacketed mixing tank 10, but in the downstream mixer 19.

Of even greater relevance is, however, that Bouette specifically requires that the whole of the chocolate melting aerating and depositing system up to its depositing valve 24 in Figure 1, is heated. Commencing at column 2, line 66 and ending at column 3, line 3, it is stated that the whole of the system from tank 10 to the valve 24 is enclosed in the heated jacket, only jacket 11 around the tank 10 being indicated by a reference numeral. The hot jacket water system is fed from a supply of hot water 28 and the lines joining this to the various conduits of the system are indicated in chain dotted lines. Furthermore, column 3, lines 24-29 makes it clear that in operation to produce an aerated or cellular chocolate product, chocolate is placed in the tank 10 and is melted by holding the temperature of the tank 10 at the about 35°C and by operating the anchor-shaped stirrup 12. The molten chocolate is then fed from the tank by pump 17 to continuous mixer 19 from where it then proceeds to depositing valve 24. Clearly, the liquefied chocolate is maintained at about 35°C from the point of melting to the point of depositing and during incorporation of the aeration substance (carbon dioxide).

This is in contrast to the Examiner's statement that while Bouette teaches heating a supply of chocolate to bring it to its molten state, one of ordinary skill in the art would expect that the supply of chocolate as sought by Bouette is a 'cooled' chocolate mix, i.e., a solid chocolate mix, that was previously prepared and cooled for storage at room temperature. Quite

to the contrary, Bouette specifically states that the entire process from melting to depositing of the aerated chocolate (at valve 24) requires the liquefied chocolate to be maintained in a liquefied state at elevated temperature (35°C).

As discussed during the Interview, a person of ordinary skill in the chocolate manufacturing art would readily understand that there are significant rheological differences between chocolate maintained at a temperature of about 35°C and about 29 to 31°C. Thus, a person of ordinary skill in the art would recognize that the phrase “about 35°C” as used in Bouette would not be considered to overlap the limitations of “about 29 to 31°C” as used in present claim 8.

It will be noted that claim 8 specifies a process for making a confectionery product having a chocolate core and a sugar-based shell coating, the process comprising the steps (a) to (f) in the specified order: (a) preparing chocolate mix in paste or liquid form from solid chocolate making ingredients and at least one fat; (b) cooling said chocolate mix to about 29°C to 31°C to form a cooled chocolate mix; (c) transferring said cooled chocolate mix into a mixing chamber and delivering a gas to the mixing chamber, either concurrently with the chocolate transfer or subsequent to the chocolate transfer; and (d) in said mixing chamber, incorporating gas into said chocolate mix maintained at a temperature of about 29°C to 31°C in a manner to form micro gas bubbles and thus create a low density chocolate.

Clearly, Bouette specifically teaches to maintain the liquefied chocolate as it exits its liquefying tank 10 and passes through the aeration conduit 18 for subsequent continuous mixing at continuous mixer 19, in a heated state using the hot water jacket system described therein. Accordingly, it is respectfully submitted the teachings of Bouette would not have suggested the presently claimed invention.

Moreover, yet another significant difference between Bouette and the present invention is where the bubbles are formed. Claim 8 has been amended to make clear that the micro bubbles are formed in the mixing chamber. To the contrary, Bouette teaches that the carbon dioxide is dissolved into the heated chocolate under pressure (Col. 3, lines 25-46) and that it is only when the chocolate exits the pressurized system and the chocolate experiences a “sharp pressure drop” that the bubbles are formed (Col. 3, lines 47-51). Bouette clearly does not teach forming micro bubbles in a mixing chamber as required by the present invention.

The Examiner has correctly stated that Bouette is silent as to the average maximum size of the gas bubbles, but relies on the Brown et al citation. However, in view of the discussion above, it is clear that Brown does not remedy the deficiency of Bouette. While Brown et al., indeed teaches an aerated chocolate with a bubble diameter of preferable less than 50 microns, Brown et al., is silent on the specific order of manufacturing steps recited in claim 8. Consequently, even if one would combine the teachings of Bouette and Brown et al., one would not arrive in obvious manner at the manufacturing process identified in claim 8, given the requirement that steps (a) to (f) mentioned in claim 8 have to be performed in the specified order set out in the claim. Similarly, neither Cully nor Beckett remedy the deficiencies of Bouette.

In addition, Applicant also note that they respectfully disagree with the Examiner’s assertion that an enrobed chocolate layer is a description of a sugar-based shell coating. While this might be a potential description of an enrobed chocolate layer in the abstract, it is axiomatic that claims are to be construed in light of the specification. At page 11, line 10 to 32, it is made clear that sugar-based shell as used in the present invention is a sugar shell such as found on M&M’s Brand Chocolate Candies® that is applied through the application of multiple layers of sugar and water. Thus, it is respectfully submitted that sugar-based shell coating

clearly would not be construed by a person of ordinary skill based on the specification as a chocolate layer.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

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